Application/Control Number: 10/646,716 Page 2

Art Unit: 2419

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Philip J. Hoffmann (Reg. No. 46,340) on October 23, 2008.

The application has been amended as follows:

IN THE CLAIMS

Canceled claims 35, 44, 46, 47, 48, 51-53

Claim 36, lines 8-10, replace "matching, by the gateway, the first parameter identifier and the second parameter_identifier with corresponding parameter identifiers included in a translation table associated with the gateway" by – determining, by the gateway, whether the first parameter identifier and the second parameter identifier match corresponding parameter identifier included in a translation table associated with the gateway --;

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 08/27/08 was filed after the mailing date of the Non Final Rejection on 05/09/2008. The submission is in

Application/Control Number: 10/646,716 Page 3

Art Unit: 2419

compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Allowable Subject Matter

- 3. Claims 36-38, 39-42, 49-50 are allowed.
- 4. The following is a statement of reasons for the indication of allowable subject matter: Claim 36 is allowed. Bahren (7,089,343) discloses receiving, by a gateway, a message in a first system (CAN system) used by a machine, the message including a parameter identifier; matching, by the gateway, the parameter identifier with a corresponding parameter identifier included in a translation table associated with the gateway, scaling a parameter value contained in the message to a second parameter value consistent with a second system using a scale factor associated with the matched parameter identifier, and sending a message including the second parameter value to module using the second system (MOST system) (figure 3, lines 45-46, the parameters) (col. 6, lines 23-25) (col. 5, lines 15-17, differently scaled in the CAN system and MOST system) (col. 5, lines 15-23, col. 6, lines 10-25, lines 35-40, col. 2, lines 7-10, lines 55-67) (col. 3, lines 45-46, this class supplied by the buffer memory 111) (col. 5, lines 56-57, extracting from the most message a function designator three bytes in length and checks whether this is contained in a list of known designators, col. 5, lines 56-57).

Klausner et al. (7,046,638) disclose receiving, by a gateway onboard a machine (figure 3, a machine includes 301, 302, 303, 304, 305, 306), a message from a module (figure 3, Bluetooth host 308.1, 308.2,..., 308.n) off-board the machine in a first data link protocol (figure 3, Bluetooth protocol) used by the off-board module (figure 3, Bluetooth host 308.1, 308.2,..., 308.n); and transmitting the message via the second data link protocol (figure 3, CAN protocol) (col. 3, lines 60-62, Signals contained in CAN messages that pass the acceptance filter of the CAN controller 301 are passed on to the protocol converter 303. The protocol converter 303 retrieves CAN signals from CAN messages, computes the actual physical value of signals such as speed or RPM (typically by applying a scaling factor), and then puts them in the payload of the target protocol's protocol data units (PDUs)); the second data link protocol (figure 3, CAN protocol) used by a destination module (figure 3, CAN controller 301) onboard the machine (figure 3, a machine includes 301, 302, 303, 304, 305, 306); and transmitting message containing the second parameter value via the second data link protocol (figure 3, CAN protocol) to the onboard destination module (figure 3, CAN controller 301) (col. 3, lines 60-62, Signals contained in CAN messages that pass the acceptance filter of the CAN controller 301 are passed on to the protocol converter 303. The protocol converter 303 retrieves CAN signals from CAN messages, computes the actual physical value of signals such as speed or RPM (typically by applying a scaling factor).

The prior art however fails to disclose determining, by the gateway, whether the first parameter identifier and the second parameter identifier match corresponding parameter identifier included in a translation table associated with the gateway; scaling the first_parameter value contained in the first message to a second parameter value consistent with the second data link protocol using a scale factor associated with the matched first parameter identifier, and the second parameter value contained in the second message to a parameter value consistent with first data link protocol using a scale factor associated with the matched second parameter_identifier;

Claim 39 is allowed. Bahren (7,089,343) discloses a translation table (col. 3, lines 30-35, rule) implemented in a memory device, the translation table including: at least one parameter identifier (col. 5, lines 15-25, parameters), a plurality of scale factors (col. 5, lines, 15-25, different scaled) associated with the at least one parameter identifier, wherein each of the plurality of scale factor corresponds to a different system (MOST system), and a universal storage section for storing a parameter data value associated with the at least one parameter identifier; and a gateway residing in a machine configured to access the translation table, wherein the gateway device: receives a message, including a first parameter identifier and a first parameter value, from a first system used by the machine, determining the first parameter identifier matches the at least one parameter identifier in the translation table (col. 3, lines 65-67), when a match is found by the gateway, scales (col. 5, lines 15-25, scaled) the first parameter value to a second parameter value consistent with a second system (MOST

system) using the scaled factor corresponding to the matched parameter identifiers, and outputs the second parameter value to a second data link using the second system (MOST system) (figure 3, lines 45-46, the parameters) (col. 6, lines 23-25) (col. 5, lines 15-17, differently scaled in the CAN system and MOST system) (col. 5, lines 15-23, col. 6, lines 10-25, lines 35-40, col. 2, lines 7-10, lines 55-67) (col. 3, lines 45-46, this class supplied by the buffer memory 111) (col. 5, lines 56-57, extracting from the most message a function designator three bytes in length and checks whether this is contained in a list of known designators, col. 5, lines 56-57).

Klausner et al. (7,046,638) disclose receiving, by a gateway onboard a machine (figure 3, 306) configured to access the translation table, wherein the gateway receives a message from a module (figure 3, a machine includes 301, 302, 303, 304, 305) onboard the machine a message from a module; the second data link protocol (Bluetooth protocol) being used by a module off—board the machine (figure 3, Bluetooth Host 308.1-308.n).

The prior art however fails to disclose determine whether the first parameter identifier and the second parameter identifier match_matches the at least one parameter identifier in the translation table; when a match is found by the gateway, scale the first parameter value to a value compatible with the second data link and scale the second parameter value to a value compatible with the first data link, using the scaled factor corresponding to the matched parameter identifier; and output a third message containing the scaled first parameter value compatible with the second data link to the off-board module via

the second data link and a fourth message containing the scaled second parameter compatible with the first data link protocol to the on-board module via the first data link

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUONG T. HO whose telephone number is (571)272-3133. The examiner can normally be reached on 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, EDAN ORGAD can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/646,716 Page 8

Art Unit: 2419

/Edan Orgad/ Supervisory Patent Examiner, Art Unit 2419